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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,593	08/05/2003	Tomomi Hase	461-145	4813
23117	7590	10/11/2005	EXAMINER	
NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203			NGUYEN, CAM N	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 10/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/633,593	Applicant(s) HASE ET AL.	
	Examiner Cam N. Nguyen	Art Unit 1754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>originally filed</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claim Objections

1. Claims 10, 11, 16, & 18 are objected to because of the following informalities:
 - A. In claim 10, line 2-3, "at least one type of element or more" should be changed to --at least one or more element--.
 - B. In claim 11, line 2, "has for its main component" should be changed to --contains, as its main component,--.
 - C. In claim 16, line 2, "has cordierite for its main component" should be changed to -contains cordierite, as its main component,--.
 - D. In claim 18, line 2-3, "the form of the ceramic support is at least one type" should be changed to --the ceramic support is in the form of at least one member--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112 (Second Paragraph)

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - A. Regarding claim 1, the claim is called for "a ceramic catalyst body", but the body does not positively describing the description of the ceramic catalyst body; instead, it

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contains the process limitations. The claim is confusing and does not clearly point out what is being claimed.

B. Regarding claim 7, line 3, the proper Markush terminology is --, said oxygen occluding component is at least one member selected from the group consisting of ceria, ceria-zirconia solid solution, and a ceria-zirconia solid solution containing transition metal element--.

C. Regarding claim 11, the proper Markush terminology is --wherein the base ceramic contains, as its main component, a ceramic material selected from the group consisting of cordierite, etc... and silica-alumina--.

D. Claim 13 recites the limitation "the fine pores" in line 2. There is insufficient antecedent basis for this limitation in the claim.

E. Regarding claim 18, the proper Markush terminology is --wherein the ceramic support is in the form of at least one member selected from the group consisting of honeycomb, pellets, powder, foam, fibers, and hollow fibers--.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1, 4, 8-10, & 12-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 & 3-14 of **copending Application No. 10/202,826** (hereinafter copending '826). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

While the ceramic catalyst body of the copending '826 recites that "the catalyst component is made of a compound containing no chlorine in the composition as the starting material", the claimed catalyst component is not being limited to whether it contains or not contain the chlorine in its composition either. Thus, it is considered such limitation is not being excluded from the instant claims. There is no patentable distinction seen between the claimed ceramic catalyst body and the ceramic catalyst body of the copending '826.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6-17, & 21-27 of **copending Application No. 10/290,325** (hereinafter copending '325). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

It is considered the claimed ceramic catalyst body is the same as the ceramic

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catalyst body of the copending '325 in view of the same base ceramic, co-catalyst component, and oxygen storage components disclose in both applications.

There is no patentable distinction seen between the instant claims and that of the copending '325.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102(b)

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 4, 7, 11, & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozawa et al., "hereinafter Ozawa", (US Pat. 5,075,276).

Ozawa discloses a catalyst which comprises a support substrate, a catalyst carrier layer formed on said support substrate and catalyst ingredients loaded on said catalyst carrier layer; wherein said catalyst carrier layer comprises: a high surface area material selected from the group consisting of alumina and titanium oxide, cerium oxide, zirconium oxide, and at least one oxide of a rare earth element other than cerium and lanthanum, etc. (see col. 7- col. 8, claim 1). The support substrate is a honeycomb-shape monolithic catalyst support substrate or a pellet-shape support substrate (see col. 8, claim 9). The support substrate comprises one selected from the group consisting of

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cordierite, mullite, alumina, magnesia, spinel, etc. (see col. 8, claim 10). The catalyst ingredients are at least one selected from the group consisting of Pt, Pd, Ir, Ru, Os, Cr, Ni, V, Cu, Co, and Mn (see col. 8, claim 11).

There is no patentable distinction seen between the claimed catalyst and the disclosed catalyst, thus anticipates the claims.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8-10 & 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ozawa et al., "hereinafter Ozawa", (US Pat. 5,075,276), as applied to claims 1, 4, 7, 11, & 18 above, and further in view of European Patent, "hereinafter EP '067" (EP 1 043 067 A2) or Japanese Patent, "hereinafter JP '128", (JP 2001310128).

Ozawa discloses a catalyst as described above, except for the claimed ceramic support material.

It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have substituted the cordierite of EP '067 for the cordierite of Ozawa because it is known and taught by EP '067 (see EP, abstract), and it has been held by the court that substitution of an equivalence for the same purpose is *prima facie obvious* involves only within the level of ordinary skill in the art to do so.

Allowable Subject Matter

11. Claims 2-3 & 5-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Citations

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

Conclusion

13. Claims 1-18 are pending. Claims 1-18 are rejected. No claims are allowed.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nguyen/cnn *Cnn*
October 03, 2005

Cam N. Nguyen
CAM N. NGUYEN
PRIMARY EXAMINER

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